

May 21, 2004
Case No. GB 000003 (7790/336)
Serial No.: 09/631,353
Filed: August 2, 2000
Page 7 of 13

REMARKS

In the Final Office Action, Examiner Baranyai rejected pending claims 1-16 on various grounds. The Applicant responds to each rejection as subsequently recited herein, and respectfully requests reconsideration and further examination of the present application under 37 CFR § 1.112:

A. Examiner Baranyai rejected claims 1-7, 9, and 11-15 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,111,869 to *Esmailzadeh* et al. in view of U.S. Patent No. 6,389,056 to *Kanterakis* et al.

The Applicant has thoroughly considered Examiner Baranyai's remarks concerning the patentability of claims 1-7, 9 and 11-15 over *Esmailzadeh* in view of *Kanterakis*. The Applicant has also thoroughly read *Esmailzadeh* and *Kanterakis*. To warrant this obviousness rejection of claims 1-7, 9 and 11-15, there must be some suggestion or motivation, either in *Esmailzadeh* and/or *Kanterakis* or in the knowledge generally available to one of ordinary skill in the art, to modify *Esmailzadeh* in view of *Kanterakis* as proposed by Examiner Baranyai. See, MPEP §2143. The Applicant respectfully traverses this obviousness rejection of claims 1 and 3-10, because *Esmailzadeh* opposes the modification *Esmailzadeh* in view of *Kanterakis* as proposed by Examiner Baranyai by teaching away from the following limitations of independent claims 1, 3, 9 and 11:

1. "wherein the secondary station includes means for subsequently transmitting a contention resolution signal encoded with a second signature", and "wherein the primary station includes means for transmitting a further response to the contention resolution signal" as recited in independent claim 1;

2. "means for transmitting a further response to a subsequent contention resolution signal encoded with a second signature"

May 21, 2004
Case No. GB 000003 (7790/336)
Serial No.: 09/631,353
Filed: August 2, 2000
Page 8 of 13

transmitted by the secondary station" as recited in independent claim 3;

3. "means for receiving a response from the primary station and subsequently transmitting a contention resolution signal encoded with a second signature" as recited in independent claim 9; and

4. "the secondary station subsequently transmitting a contention resolution signal encoded with a second signature", and "the primary station transmitting a further response to the contention resolution signal" as recited in independent claim 11.

As to the traversal, *Esmailzadeh* teaches away from any type of contention resolution signal and response being communicated between the secondary station and the primary station by devising a non-collision technique that omits a contention resolution phase after a transmission of an acknowledgement by the primary station is received by the secondary station. This non-collision technique of *Esmailzadeh* relies on data transmission schedules based on orthogonal codes.

Specifically, *Esmailzadeh* teaches "[A] method of mobile communication includes determining schedules for transmitting and receiving data, and transmitting and receiving data between a base station and a plurality of mobile terminals according to the schedules. Particular orthogonal codes are transmitted from mobile stations to the base station as alert signals indicating the presence of data to be transmitted. The base station checks whether particular orthogonal codes are contained in the alert signals transmitted from the mobile terminals to the base station. When the particular orthogonal codes are detected in the alert signals transmitted from the mobile stations to the base station, data representing the detected orthogonal codes and the schedules for transmitting the data from the mobile terminals to the base station are transmitted from the base station to the mobile terminals as an alert response in response to the alert signals. When the data representing the orthogonal codes used for the alert signals transmitted from the

May 21, 2004
Case No. GB 000003 (7790/336)
Serial No.: 09/631,353
Filed: August 2, 2000
Page 9 of 13

mobile terminals to the base station are contained in the alert response transmitted from the base station to the mobile terminals, the data transmission schedules in the alert response are read out at the mobile terminals and the data are transmitted from the mobile terminals to the base station according the schedules that are read out.

When the data are to be transmitted and received between the base station and the mobile terminals according to the above-mentioned mobile communication method, mobile terminals which intend to transmit data select and generate particular orthogonal codes out of a plurality of orthogonal codes, and transmit these generated orthogonal codes to the base station as alert signals indicating the presence of data that are to be transmitted. Here, the orthogonal codes transmitted as alert signals from the mobile terminals to the base station are such codes that the inner products of the same codes assume particular values but the inner products of different codes assume a value of zero.

The base station that has received the alert signals generates orthogonal codes and checks whether these generated orthogonal codes are contained in the alert signals transmitted from the mobile terminals to the base station. When the orthogonal codes generated by the base station are detected in the alert signals transmitted from the mobile terminals to the base station, the base station that has received the alert signals determines schedules for transmitting the data from the mobile terminals to the base station. Then the base station transmits, to the mobile terminals, the data representing the detected orthogonal codes and the determined schedules for transmitting data from the mobile terminals to the base station as an alert response to the alert signals.

Upon receiving the alert response, the mobile terminals compare the orthogonal codes transmitted from the mobile terminals to the base station with orthogonal codes represented by the data stored in the alert response, and check if the data representing the orthogonal codes used in the alert signals transmitted from the mobile terminals to the base station are contained in the alert response transmitted from the base station to the mobile terminals. When the data representing the orthogonal codes used by a mobile terminal as its alert signal are contained in the alert response from the base station, the data transmission schedules in the alert

May 21, 2004
Case No. GB 000003 (7790/336)
Serial No.: 09/631,353
Filed: August 2, 2000
Page 10 of 13

response are read out by the mobile terminal, and the data are transmitted from the mobile terminal to the base station according to the schedules that are read out.

According to the mobile communication method as described above, the data are transmitted and received after the schedules are determined by alert signals of orthogonal codes. Therefore, an efficient communication of data can be accomplished between the base station and the plurality of mobile terminals.” See, *Esmailzadeh* at column 3, line 24 to column 4, line 30.

Thus, *Esmailzadeh* clearly fails to disclose and teaches away from any type of contention resolution signal and response being communicated between the secondary station and the primary station. This is indisputable in view of the fact that one of *Esmailzadeh*’s objective is to be efficient and any incorporation of a contention resolution signal and response being communicated between the secondary station and the primary station would be inefficiently redundant.

Withdrawal of the rejection of independent claims 1, 3, 9 and 11 under 35 U.S.C. §103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* is therefore respectfully requested.

Claims 2 depends from independent claim 1. Therefore, dependent claim 2 includes all of the elements and limitations of independent claim 1. It is therefore respectfully submitted by the Applicant that dependent claim 2 is allowable over *Esmailzadeh* in view of *Kanterakis* for at least the same reason as set forth herein with respect to independent claim 1 being allowable over *Esmailzadeh* in view of *Kanterakis*. Withdrawal of the rejection of dependent claim 2 under 35 U.S.C. §103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* is therefore respectfully requested.

Claims 4-7 depend from independent claim 3. Therefore, dependent claims 4-7 include all of the elements and limitations of independent claim 3. It is therefore respectfully submitted by the Applicant that dependent claims 4-7 are allowable over *Esmailzadeh* in view of *Kanterakis* for at least the same reason as set forth herein with respect to independent claim 3 being allowable over *Esmailzadeh* in view of *Kanterakis*. Withdrawal of the rejection of dependent claims 4-7 under 35 U.S.C.

May 21, 2004
Case No. GB 000003 (7790/336)
Serial No.: 09/631,353
Filed: August 2, 2000
Page 11 of 13

§103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* is therefore respectfully requested.

Claims 12-15 depend from independent claim 11. Therefore, dependent claims 12-15 include all of the elements and limitations of independent claim 11. It is therefore respectfully submitted by the Applicant that dependent claims 12-15 are allowable over *Esmailzadeh* in view of *Kanterakis* for at least the same reason as set forth herein with respect to independent claim 11 being allowable over *Esmailzadeh* in view of *Kanterakis*. Withdrawal of the rejection of dependent claims 12-15 under 35 U.S.C. §103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* is therefore respectfully requested.

B. Examiner Baranyai rejected claims 8, 10 and 16 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,111,869 to *Esmailzadeh* et al. in view of U.S. Patent No. 6,389,056 to *Kanterakis* et al. and in further view of U.S. Patent No. 6,643,275 to *Gustafsson* et al.

Claim 8 depends from independent claim 3. Therefore, dependent claim 8 includes all of the elements and limitations of independent claim 3. It is therefore respectfully submitted by the Applicant that dependent claim 8 is allowable over *Esmailzadeh* in view of *Kanterakis* and in further view of *Gustafsson* for at least the same reason as set forth herein with respect to independent claim 3 being allowable over *Esmailzadeh* in view of *Kanterakis*. Withdrawal of the rejection of dependent claim 8 under 35 U.S.C. §103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* and in further view of *Gustafsson* is therefore respectfully requested.

Claim 10 depends from independent claim 9. Therefore, dependent claim 10 includes all of the elements and limitations of independent claim 9. It is therefore respectfully submitted by the Applicant that dependent claim 10 is allowable over *Esmailzadeh* in view of *Kanterakis* and in further view of *Gustafsson* for at least the same reason as set forth herein with respect to independent claim 9 being allowable over *Esmailzadeh* in view of *Kanterakis*. Withdrawal of the rejection of dependent

May 21, 2004
Case No. GB 000003 (7790/336)
Serial No.: 09/631,353
Filed: August 2, 2000
Page 12 of 13

claim 10 under 35 U.S.C. §103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* and in further view of *Gustafsson* is therefore respectfully requested.

Claim 16 depends from independent claim 11. Therefore, dependent claim 16 includes all of the elements and limitations of independent claim 11. It is therefore respectfully submitted by the Applicant that dependent claim 16 is allowable over *Esmailzadeh* in view of *Kanterakis* and in further view of *Gustafsson* for at least the same reason as set forth herein with respect to independent claim 11 being allowable over *Esmailzadeh* in view of *Kanterakis*. Withdrawal of the rejection of dependent claim 16 under 35 U.S.C. §103(a) as being unpatentable over *Esmailzadeh* in view of *Kanterakis* and in further view of *Gustafsson* is therefore respectfully requested.